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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,103	12/15/2000	Sheng-Hsin Hu	16,029	9923
35844	7590	10/16/2003		
PAULEY PETERSEN KINNE & ERICKSON 2800 WEST HIGGINS ROAD SUITE 365 HOFFMAN ESTATES, IL 60195				
			EXAMINER THOMPSON, CAMIE S	
			ART UNIT 1774	PAPER NUMBER 16

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/738,103	HU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Camie S Thompson	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27, 29-60 and 80-84 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 55-57 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-23, 26, 27, 29-39, 41-54 and 80-84 is/are rejected.
- 7) ☒ Claim(s) 7, 24, 25 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                            | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other:  |

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### **DETAILED ACTION**

1. Applicant's amendment and accompanying remarks filed July 28, 2003 have been acknowledged.
2. Examiner acknowledges amended claims 1, 12-23, 27, 35, 39-40, 42-43, 46-47, 50-51, 54-55 and 58.
3. The rejection of claims 1-27, 29-60 and 80-84 under 35 U.S.C. 102(b) as being anticipated by Mauro et al., U.S. Patent Number 5,480,636 is withdrawn due to applicant's argument.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
5. Claims 43-46 and 51-54 recite the limitation "particles". Claims 27 and 47, which claims 43-46 and 51-54 depend respectively, recite coated activated material not "particles". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, 8-23, 26-27, 29-39, 41-42, 47-50, 58-60 and 80-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohama, U.S. Patent Number 5,703,152.

Ohama discloses a deodorizing composition that can capture bad odor substances such as ammonia and amines when sprayed onto fibrous material such as activated carbon as per instant claims 1 and 5-6 (see abstract and column 1, lines 24-41). Ohama also discloses using a deformable, hydrophobic binding agent such as synthetic rubber, silicon resins and fluorethylene resins; a masking agent and a blowing agent as per instant claims 1, 8, 19-23, 27, 29-30, 35, 42, 49, 60 and 80-83 (see column 4, lines 12-64). Additionally, the reference discloses using colored inorganic pigment to color the coating material and kaolin or talc to create an opaque coating material as per instant claims 11, 13, 38, 48, 50, 58 (see column 4, lines 55-61). Column 4, lines 12-66 of the reference disclose a deodorizing composition that includes an aqueous slurry that can be impregnated in a fibrous material wherein a masking agent and blowing agent make the coating material porous as per instant claims 1, 27, 39, 41-42, 47 and 84. Additionally, column 4 of the reference discloses the use of kaolin as an extender to provide opacity and pigments such as titanium dioxide as per instant claims 36-37. In the

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reference, Ohama discloses using metal oxides as per instant claim 26 (see column 3, lines 24-31).

The coated activated carbon has a relative adsorption efficiency of at least 30% with respect to ammonia, a Shore A hardness value of less than 70, a Hunter Lab L value of at least 40 and an absolute "a" value or absolute "b" value greater than 10, as these are the physical properties of the coated activated carbon material as per instant claims 1-4, 9-10 and 12. Therefore, these features are inherent.

As a mechanical property, the coated activated carbon has a Particulate Noise Level of about 52 or less and is at least 6 decibels lower than the uncoated activated carbon as per instant claims 14-18, 27, 31-34, 47, 50, 59 and 80.

7. Claims 55-57 are allowed.

8. Claims 7, 24-25 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

9. Applicant's arguments filed July 28, 2003 have been fully considered but they are not persuasive. Applicant argues that the Ohama reference does not disclose a water-insoluble coating material including a masking agent a binding agent for coating activated carbon. Ohama discloses a deodorizing resin composition that comprises an aqueous slurry that includes a resin and a porous substance. Ohama discloses that the porous substance may include a metal oxide,

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as does applicant. Ohama discloses that the aqueous slurry may be impregnated into a fibrous material and dried. The reference also discloses that the aqueous slurry is mixed and kneaded with an adsorbent such as activated carbon and is dried. Therefore, the slurry is coated onto the activated carbon. Additionally, the reference discloses that the slurry may be used as a component for the preparation of a resinous composition. The resinous composition of the Ohama reference also includes water insoluble resins. Applicant argues that various embodiments of the Ohama reference were used improperly. Ohama discloses that the aqueous slurry can be part of the resinous composition. The reference also discloses that the resinous composition can be used on fibrous products, as does the aqueous slurry of the reference. Applicant argues that the aqueous slurry is not the particular aqueous slurry being applied to the activated carbon in Ohama. The reference specifically states that the aqueous slurry of the Ohama invention can be a component for a resinous composition such as a paint composition. Applicant argues that the deodorizing composition of the Ohama reference does not include a water-insoluble binding material, pigment or a blowing agent. Ohama discloses water-insoluble resins, pigment such as titanium dioxide and a blowing agent. Applicant argues that the resinous materials, pigments and blowing agents in the Ohama reference are used in paint compositions. The materials used in the paint composition of the Ohama reference also can include an aqueous slurry, which can be dried onto activated carbon. Applicant argues that the water-insoluble resinous material in the Ohama reference is not equivalent to applicant's binding agent. Ohama uses water-insoluble resins such as silicone resins, fluoroethylene resins and synthetic resins, as does applicant. Applicant argues that only the deodorizing composition of the Ohama reference is combined with activated carbon. Ohama discloses that the resinous/paint composition can

comprise an aqueous slurry. The aqueous slurry is combined with the activated carbon. Therefore, the resinous composition comprising the aqueous slurry can be combined with the activated carbon. Applicant argues that Ohama does not disclose a water-insoluble resin, a pigment material or a blowing agent in the aqueous slurry deodorizing composition. Ohama does disclose that the resinous/paint composition comprises the aqueous slurry. The resinous/paint composition comprises the water-insoluble resin, a pigment material and a blowing material. The slurry is part of the resinous/paint composition. Therefore, the slurry is part of the composition that comprises the water-insoluble resin, a pigment material and a blowing agent. Applicant argues Ohama's best mode for practicing the Ohama invention. Ohama discloses in the best mode for practicing the invention the aqueous slurry that can be included in a resinous/paint composition. Applicant argues that the Ohama reference does not disclose using the deodorizing paint composition with activated carbon. Ohama discloses that the deodorizing paint composition is mixed into the form of an aqueous slurry. Ohama also discloses that the aqueous slurry can be mixed and kneaded with activated carbon and dried to make a molded product such as a plate. Additionally, Ohama discloses that the paint composition can be applied to various surfaces such as plastic plates. Applicant argues that the individual components of the Ohama reference combined are not disclosed in the Ohama reference. Ohama discloses that the resinous composition can be combined and dried to form a molded resin article wherein the aqueous slurry is present. It is disclosed by Ohama that the aqueous slurry is mixed and kneaded with activated carbon and is dried and molded into a shaped article. Applicant argues that reference must disclose every element of the instantly claimed invention. The Ohama reference discloses a coated activated carbon that is coated with

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a binding agent, masking agent and blowing agent, as does applicant. Applicant argues that Ohama does not disclose or suggest claims 24 and 25. Examiner has withdrawn claims 24 and 25 of the instant invention due to applicant's argument. Claims 24 and 25 now stand objected to. Applicant argues that Ohama reference does not disclose activated carbon particles having a mean particle size of less than 2 mm. Examiner has withdrawn the rejection of instant claims 55-57 due to applicant's argument. Claims 55-57 are now allowable subject matter.

Applicant's argument is not persuasive. Therefore, the rejection is maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone number for the Group is (703) 872-



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9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read 'Cynthia Kelly', written in a cursive style.